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From: Restivo, Angela
Sent: Sun 8/16/2015 9:22:39 PM
Subject: FW: OW Management Report for Gold King Mine Release - August 16, 2015
OW Management Report 08162015.docx

From: Goldbloom-Helzner, David **On Behalf Of** EOC Water
Sent: Sunday, August 16, 2015 4:21 PM
To: Best-Wong, Benita; Workman, Rosemary; Travers, David; Tingley, Kevin; Tidwell-Shelton, Patricia; Southerland, Elizabeth; Shapiro, Mike; Sawyers, Andrew; Pickard, Brian; Newberry, Debbie; Lopez-Carbo, Maria; Lape, Jeff; Grevatt, Peter; Frace, Sheila; Evans, David; Clark, Becki; Bissonette, Eric; Gilinsky, Ellen; Kopocis, Ken
Cc: Goldbloom-Helzner, David; Ison, Dawn; Fencil, Jeffrey; McFeely, Mikko; Kamrath, Christian; Bahrman, Sarah; Kahn, Lisa; Manheimer, Jenna; McCoy, Melinda; Ngo, Kim; Restivo, Angela; McCasland, Mark; Garcia, David; Lee, Bessie; Li, Corine; Montgomery, Michael
Subject: OW Management Report for Gold King Mine Release - August 16, 2015

OW Management Report

Gold King Mine Release and Typhoon Soudelor

August 16, 2015

Gold King Mine Release

Background:

On August 5, while investigating the Gold King Mine in Colorado, an EPA cleanup team triggered a release of mine wastewater into Cement Creek. The EPA is working closely with responders and local, state and tribal officials to monitor water contaminated by the release. The release's path flows through three of the EPA's regions - Region 8 (Colorado, Utah, Southern Ute Tribe, and Ute Mountain Ute Tribe); Region 6 (New Mexico), and Region 9 (Navajo Nation). EPA has activated its Emergency Operations System to ensure coordination among its regions, laboratories and national program offices in Washington, D.C. The EPA has also set up an incident command center in Durango, CO. The EPA is coordinating with officials in Colorado, New Mexico, Utah, Southern Ute Tribe and Navajo Nation and the Ute Mountain Ute Tribe.

Response Coordination:

The EPA HQ EOC is now fully activated. Shifts will be 9:30 AM – 7 PM, Seven days a week. David Goldbloom-Helzner will staff the desk August 16, 17 and 20, and Brian Pickard will staff the desk August 18, 19 and 21.

On August 14, 2015, the New Mexico Environment Department (NMED) lifted the ban on the use of private domestic water wells. NMED also issued advisories to flush irrigation ditches as a safety precaution prior to resuming irrigation for agriculture and livestock.

On August 15, 2015, New Mexico lifted the ban on using the Animas and San Juan Rivers to supply the San Juan County's drinking water systems. Until the New Mexico Game and Fish can determine the level of contamination in fish, it strongly recommends that anglers do not eat the fish they catch.

Animas River sediment samples were posted to the incident website on August 14. No results exceeded recreational screening levels.

EPA Statement on New Mexico Reopening Private Domestic Water Well Use

(Effective August 14, 2015):

The decision to resume private domestic water well use is based on water quality sampling results collected by both New Mexico Environment Department and the EPA. Reopening private domestic water well use is a state and local decision and we believe they have taken appropriate steps in arriving at this decision. EPA sampling results from the river collected last week similarly show that water quality conditions are returning toward pre-event conditions. We know the state has gone through a deliberative process in making this decision. EPA will continue to sample, analyze, and make data available to support local decision makers moving forward to allow them to make the best informed decisions.

In an August 14, 2015 press release from the City of Durango, Colorado, the City resumed pumping raw water for drinking water treatment and distribution after independent sampling results supported such a decision. The City has also lifted the outdoor irrigation restrictions.

EPA Activities:

On August 15, 2015, EPA released additional water quality data from Aug. 7 to Aug. 11, 2015, on the San Juan River between Farmington and Shiprock, New Mexico.

Table 1 – Operation Sampling Activities (August 13, 2015)

| Matrix | Region | August 13, 2015 |
|------------------------------|---------------|------------------------|
| Private Drinking Water Wells | Region 6 | 42 |
| | Region 8 | 19 |
| | Region 9 | 0 |
| Surface Water Samples | Region 6 | 9 |
| | Region 8 | 4 |
| | Region 9 | 7 |
| Sediment Samples | Region 6 | 39 |
| | Region 8 | 12 |
| | Region 9 | 7 |

Table 2 – Public Support Summary

| Activity | Region | August 13, 2015 | | Cumulative | |
|---|----------|-----------------|-----------------------|------------|-----------------------|
| | | Items | Quantity (gallons) | Items | Quantity (gallons) |
| Potable Water Deliveries | Region 6 | NR | NR | NR | NR |
| | Region 8 | 0 | 0 | 9 | 58,200 |
| | Region 9 | 0* | 0* | 0* | 0* |
| Livestock / Agricultural Water Deliveries | Region 6 | 9 | 298,863 | 21 | 532,623 |
| | Region 8 | 1 | 15,430 | 31 | 91,020 |
| | Region 9 | 2 | 28,000 | 2 | 28,000 |
| Agricultural Food Deliveries | Region 6 | NR | NR | NR | NR |
| | Region 8 | NR | NR | NR | NR |
| | Region 9 | 0 | 0 | 0 | 0 |

Notes: NR- No deliveries reported.

*Water deliveries in Region 9 are being handled by the Navajo Tribal Utility Authority.

Drinking water systems affected by the response as of August 13, 2015, and their status are summarized below:

Table 3 – Public Support Summary

| Region | Number of Affected Water Systems | Population | Status |
|---------------|---|-------------------|-----------------------|
| Region 6 | 8 | 80,392 | All systems operation |
| Region 8 | 0 | 0 | All systems operation |
| Region 9 | 0 | 0 | All systems operation |

Region 8:

The CDPHE, and public water systems regulated by CDPHE in the impacted area, are taking raw and finished water samples to monitor water quality. CDPHE is coordinating with City of Durango drinking water treatment staff regarding the Animas River intake. It was not in use at the time of the event and has been off-line pending water quality assessment with CDPHE and completion of irrigation canal flushing.

CDPHE has 7 staff in area and continued collecting the Animas River surface water and sediment sampling. Also continued outreach to public water supply system operators. Public system operators are continuing normal testing of their systems.

In response to requests from nine residents, one the EPA sampling teams will be working with the Southern Ute trip sampling private drinking water wells. Durango area operations are conducting more ditch survey work. Irrigation ditches in the southern area of the Animas in Colorado that had minimal staining will be flushing and potentially opening today.

The EPA is working with Bureau of Reclamation (BOR) on taking a sediment sample on 8/14/2015 at the intake to the Animas La Plata Nighthorse Reservoir.

The EPA is collecting and assessing water quality from Cement Creek and the Animas daily. Water sampling is occurring, and pH levels and dissolved concentrations of metals are being monitored. The EPA has several sampling teams; one surface water and four well water in the field on 8/15/2015.

Potable Water Delivery as of 8-14: Total Deliveries: 12 totaling 87,400 gallons

Stakeholders:

- Single Family Home cisterns.
- Multiple family homes on neighborhood cistern.

1120 cases of bottled water have been purchased to hand out to community.

Region 6:

NMED informed EPA that the Town of Morningstar's reserve had dropped drastically and the Town only had an estimated 48 hours of available supply, as of August 14, 2015. EPA is acting quickly to mobilize a temporary pump to facilitate an emergency connection between Farmington and Morningstar. Morningstar and Farmington are completing the connection between their water systems, current plans are to complete this task the afternoon of 8/16/15. NMED supports EPA's decision to put this pumping system into place. The water system operators will complete the connections and will operate the system once functional. Although the public water intakes have been opened, it will take at least 48 hours for the system to completely come back on line.

On August 15, 2015, EPA began transporting and offloading raw water into Morningstar's pretreatment settling ponds. Seven trucks were dedicated to delivering raw water to Morningstar. It is not expected to significantly reduce the need for additional water supply. Morningstar was very appreciative of EPA's quick response and assistance.

Region 9:

- R9 is conducting surface water sampling and sediment sampling along the San Juan River in the Navajo Nation at 11 monitoring sites
- Surface water sampling was conducted at Lake Powell on August 15, 2015.
- The Navajo Tribal Utility Authority has initiated sampling of the three wells at Montezuma Creek and at the intake of the Mexican Hat surface water plant.
- EPA (R9) is paying for water hauling services to deliver water to areas served by wells on the NTUA – Montezuma Creek public water system which was shut down as a precaution
- EPA (R9) continues to provide over 50,000 gallons of water per day to designated

distribution areas identified by NTUA.

- Water trucks to address Navajo agricultural and livestock needs have been secured and will be continuing to deliver water to designated locations.

Infrastructure Impacts:

Region 6:

Based on conversation with the State of New Mexico and drinking water systems on August 12, 2015, the following is the list of affected water systems and their status:

| System Name | Population | # Days Water Available |
|---------------------------------|------------|-------------------------------------|
| Aztec Domestic Water System | 6800 | 10 days |
| Farmington Water System | 47000 | 60 days |
| Lower Valley WUA | 8428 | 6 days |
| Morningstar Water Supply System | 6423 | 3-5 days* |
| Northstar WDWCA | 4123 | 30 days |
| Southside Mutual Domestic | 1593 | 3-5 days get water from Aztec |
| Upper La Plata WUA | 2265 | Get water from Aztec and Farmington |
| Flora Vista | 4300 | 1 day/get water from Aztec |
| Total Population | 80,392 | |

* see note in Region 6 EPA Activities above

Sampling Results: EPA continues to post sampling results on the public website

Typhoon Soudelor

Tropical Storm (TS) Goni has formed to the southeast of the Northern Mariana Islands. The National Weather Service has issued a typhoon watch for Saipan and Tinian, meaning typhoon-force winds of 74 mph or greater are possible within 48 hours. The system is currently predicted to pass approximately 50 miles south of Saipan during the early morning of Sunday, 8/16 CNMI time (Saturday afternoon Pacific time) with wind speeds of 70 mph, which is just under typhoon strength.

Commonwealth Utility Corporation (CUC): Water Distribution Recovery Summary:

- Currently: 34 wells operable, producing 3.2MGD [31%]
- Susupe, Chalan Kanoa, Chalan Kiya, San Antonio, Oleai and San Jose Villages getting water via distribution periodically.
- Some wells are not producing 24 hrs/day due to poor coordination of fuel delivery to generators.

Water Testing:

- Shipment of donated lab supplies from IDEXX Laboratories was sent out to DEQ and is expected to arrive in 4-5 days

- A generator is being wired to run the DEQ certified water testing lab. Once up and running, sampling and testing will commence, starting with bottled water companies and RO treated water distribution points.

Emergency Water Distribution:

- CUC filling stations: Navy Hill, As Matius, As Teo, Kanat Tabla, Kagman, Capital Hill open 12-7pm for residential use. Up to 100 gallons/household/day.

Bottled water:

- 8/13 and 8/14 Water Task Force visited 13 bottled water and ice companies to survey operational status and finished water capacity.
 - o 5 companies are operational and producing 9000 gallons of potable water/day
 - o 6 companies are not operational but can produce 6000+ gallons/day, once water and power are restored (some production data unavailable)

Survey of Retail Stores for Bottled Water Availability:

- Survey is completed, conclusion is that there are plenty of cases of bottled water available for purchase.

Wastewater:

- Water Task Force SME providing technical assistance to CUC to evaluate Sadog Tasi WWTP restarting plant operations.
- With CUC distributing water intermittently, more water entering wastewater collection system. Lift stations without permanent generators are not keeping up. Small spills occurred at lift station SR2 Wednesday and Thursday.

